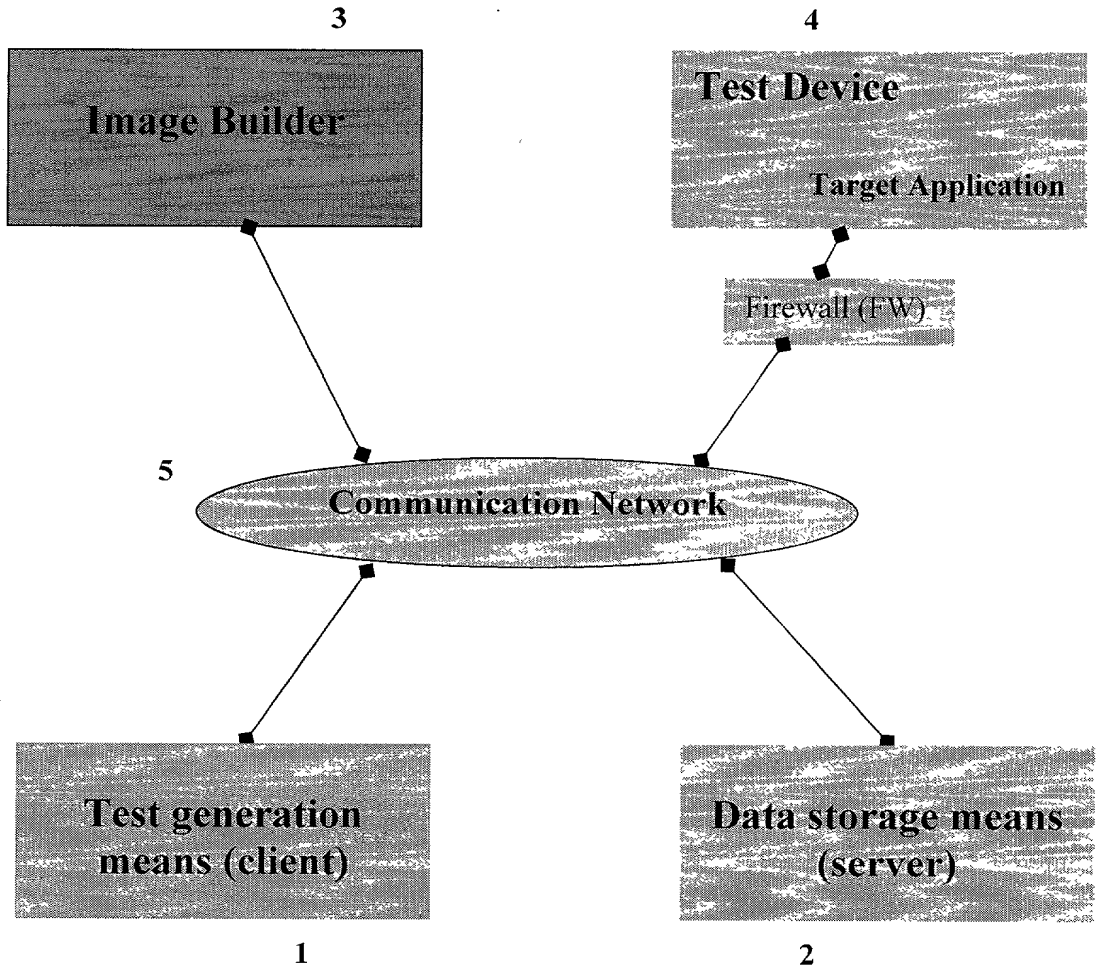
3
4
Image Builder
Test Device
Target Application
Firewall (FW)
5
Communication Network
Test generation means (client)
Data storage means (server)
1
2

Figure 1

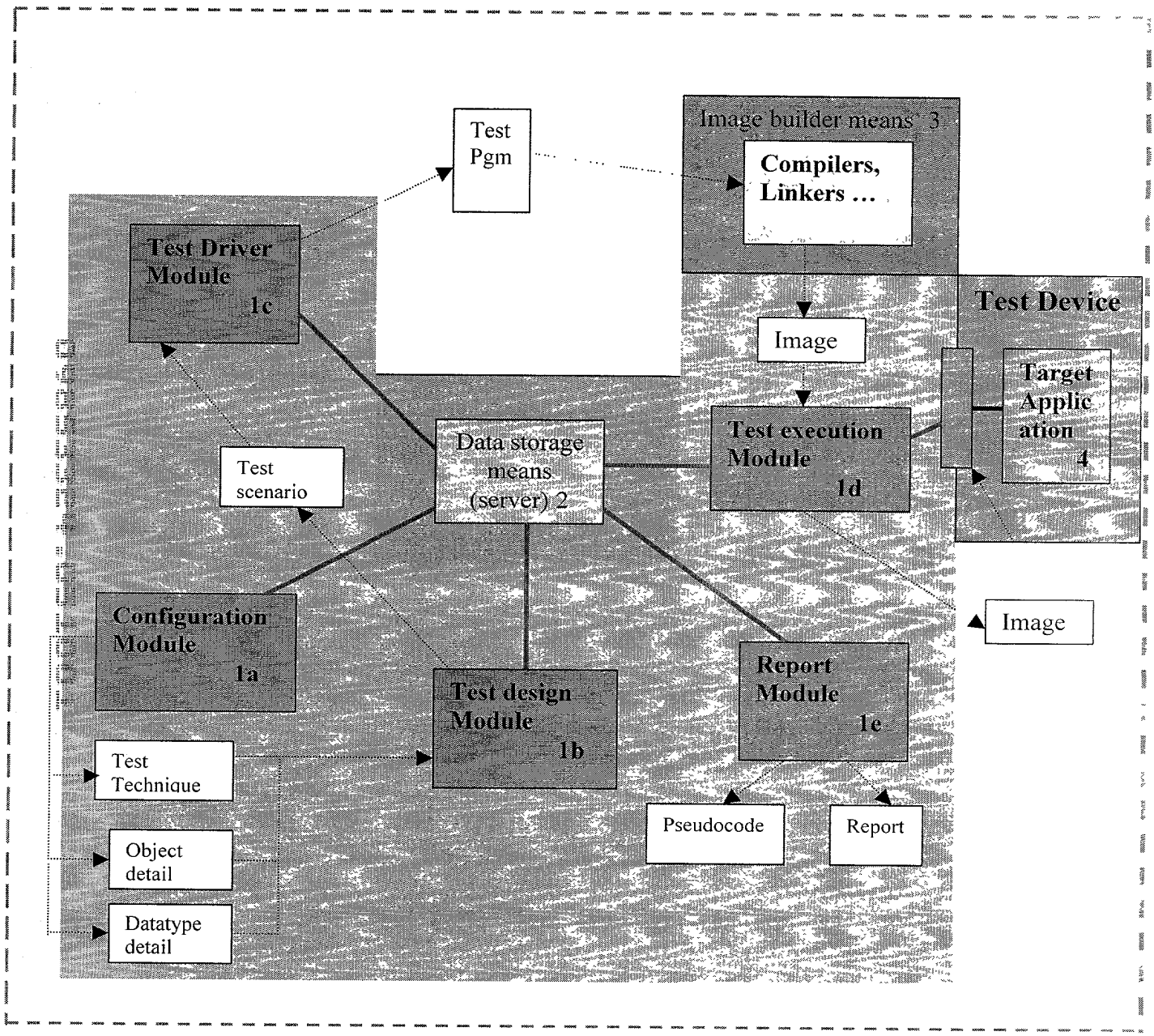
Test Pgm
Image builder means 3
Compilers, Linkers ...
Test Driver Module 1c
Test Device
Image
Target Applic ation 4
Test execution Module 1d
Test scenario
Data storage means (server) 2
Configuration Module 1a
Image
Report Module 1e
Test design Module 1b
Test Technique
Pseudocode
Report
Object detail
Datatype detail

Figure 2

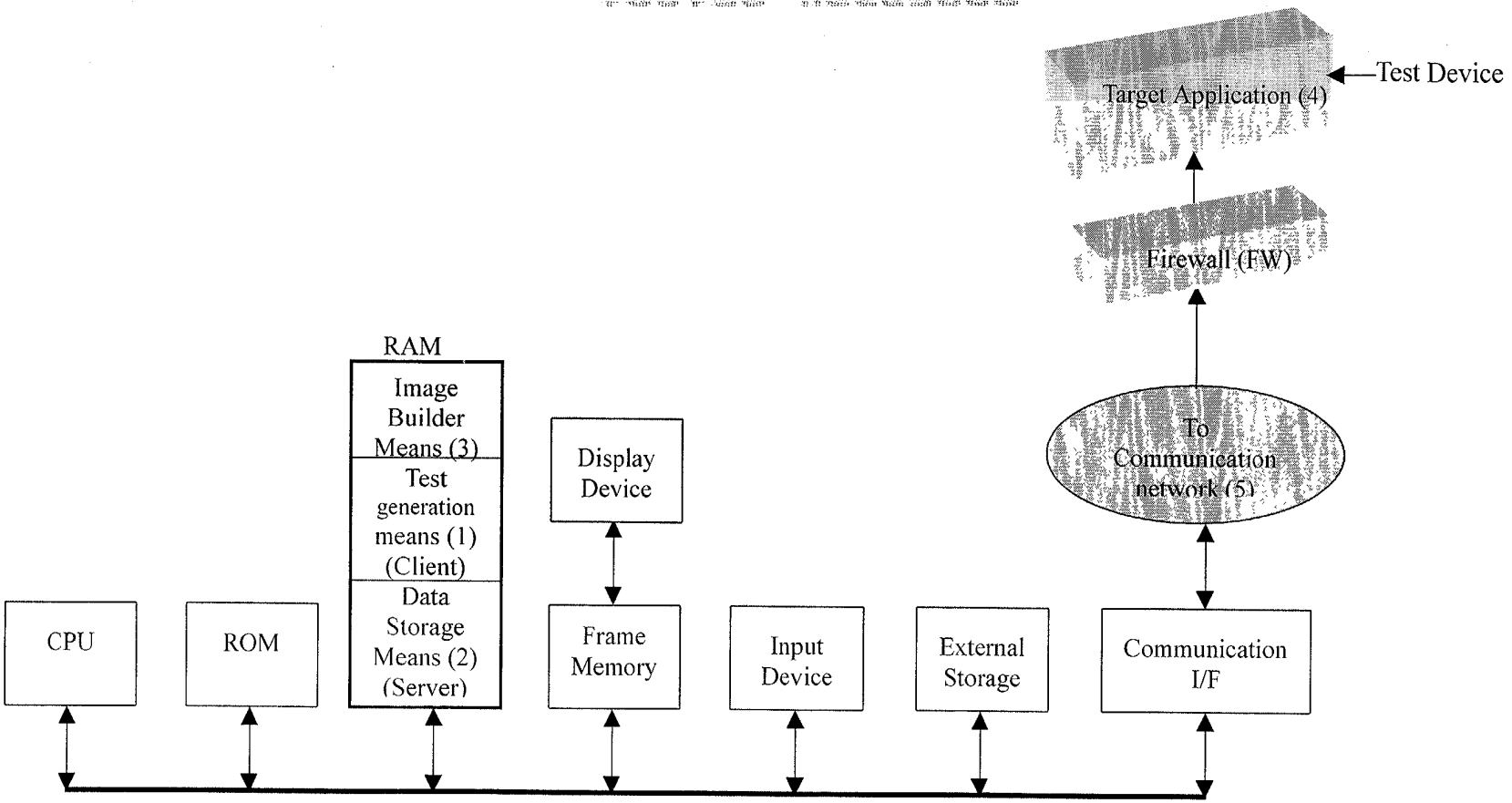
Test Device
Target Application (4)
Firewall (FW)
To Communication network (5)
RAM
Image Builder Means (3)
Test generation means (1) (Client)
Data Storage Means (2) (Server)
Display Device
CPU
ROM
Frame Memory
Input Device
External Storage
Communication I/F

Figure 3

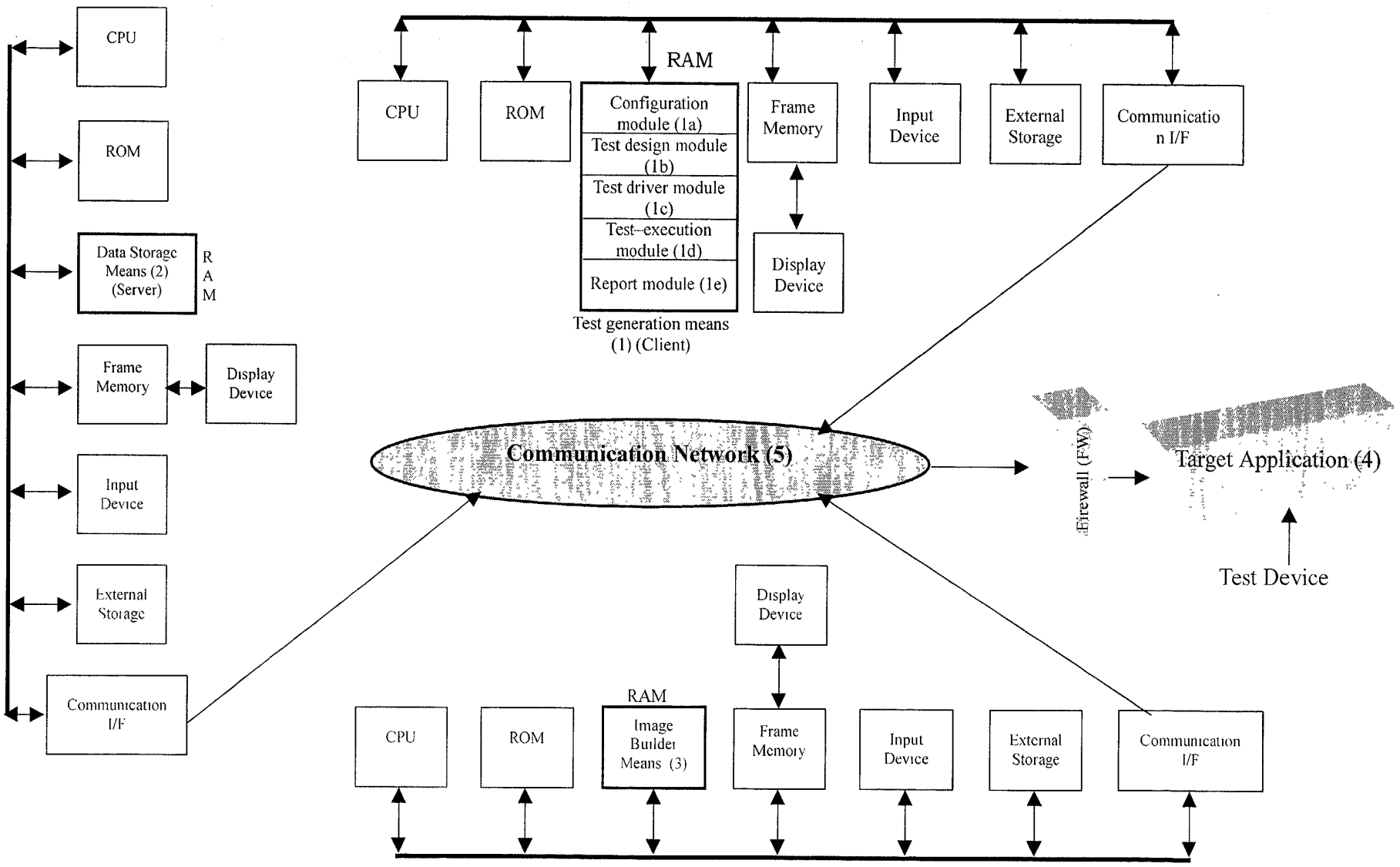
CPU
ROM
Data Storage Means (2) (Server)
R A M
Frame Memory
Display Device
Input Device
External Storage
Communication I/F
RAM
CPU
ROM
Configuration module (1a)
Test design module (1b)
Test driver module (1c)
Test–execution module (1d)
Report module (1e)
Test generation means (1) (Client)
Frame Memory
Display Device
Input Device
External Storage
Communicatio n I/F
Communication Network (5)
Firewall (FW)
Target Application (4)
Test Device
Display Device
RAM
CPU
ROM
Image Builder Means (3)
Frame Memory
Input Device
External Storage
Communication I/F

Figure 4

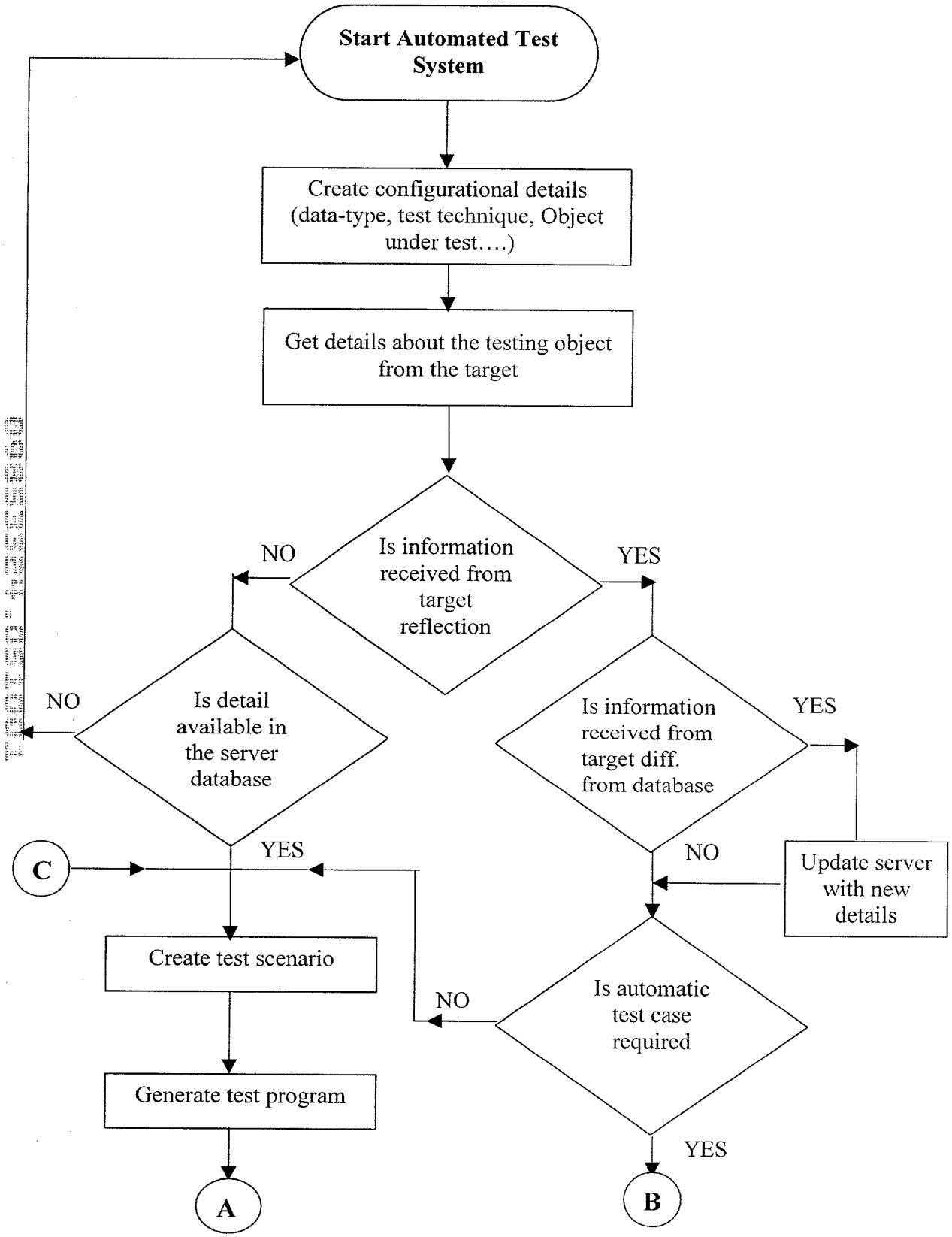
Start Automated Test System
Create configurational details (data-type, test technique, Object under test....)
Get details about the testing object from the target
Is information received from target reflection
NO
YES
Is detail available in the server database
NO
Is information received from target diff. from database
YES
C
YES
NO
Update server with new details
Create test scenario
Is automatic test case required
NO
Generate test program
YES
A
B

Figure 5a

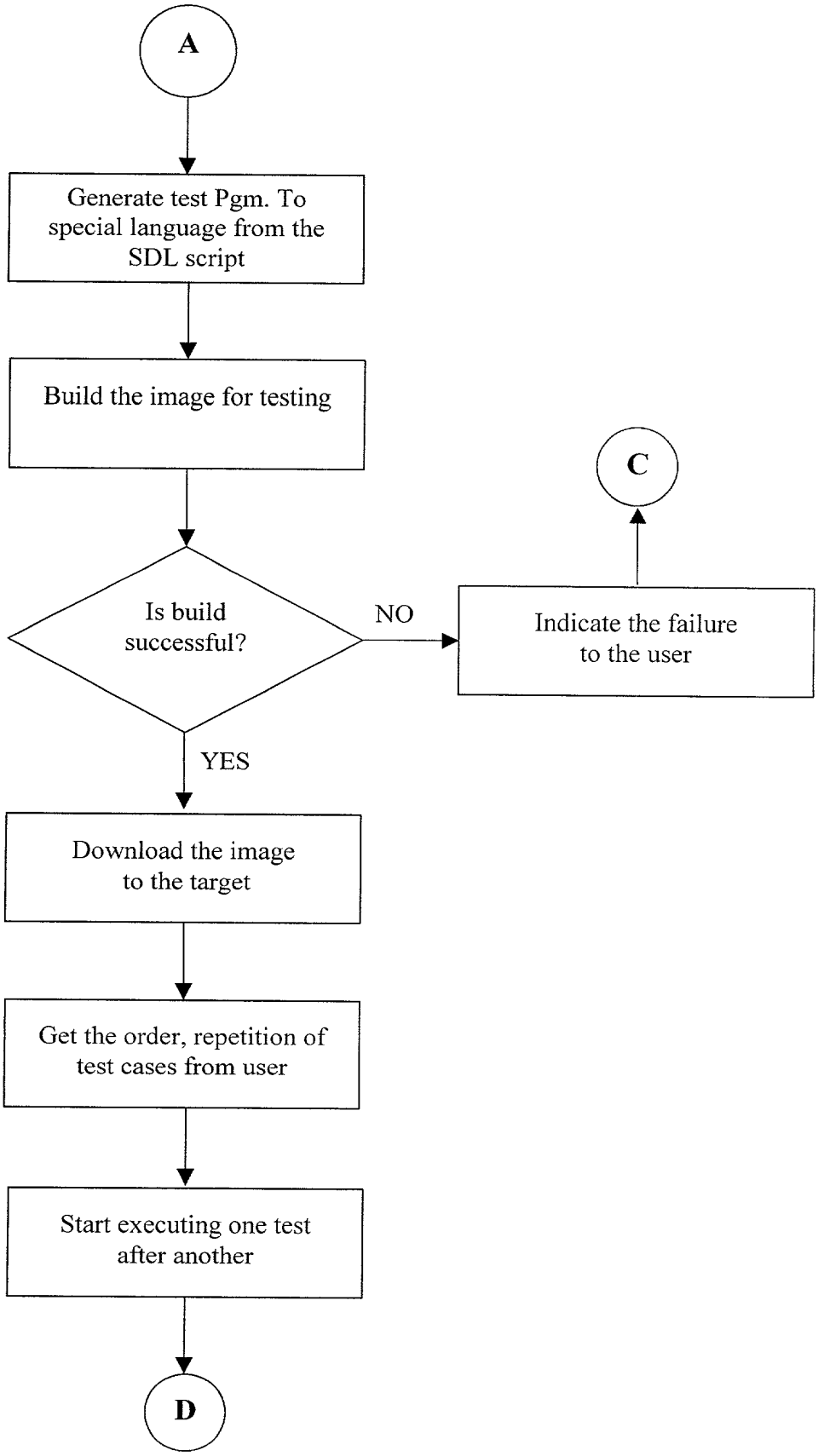
A
Generate test Pgm. To special language from the SDL script
Build the image for testing
C
Is build successful?
NO
Indicate the failure to the user
YES
Download the image to the target
Get the order, repetition of test cases from user
Start executing one test after another
D

Figure 5b

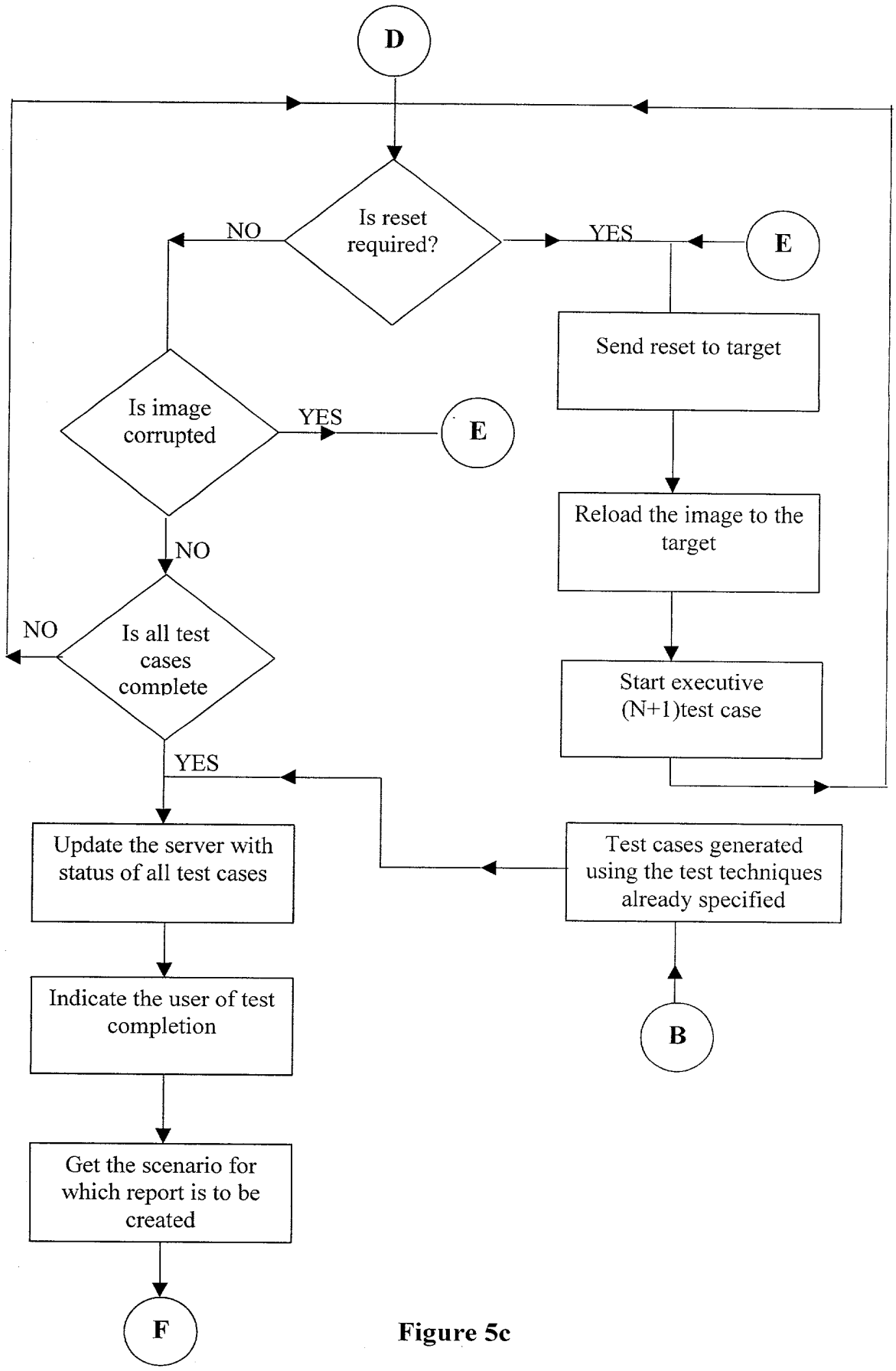
D
Is reset required?
NO
YES
E
Send reset to target
Is image corrupted
YES
E
Reload the image to the target
NO
Is all test cases complete
NO
Start executive (N+1)test case
YES
Update the server with status of all test cases
Test cases generated using the test techniques already specified
Indicate the user of test completion
B
Get the scenario for which report is to be created
F

Figure 5c

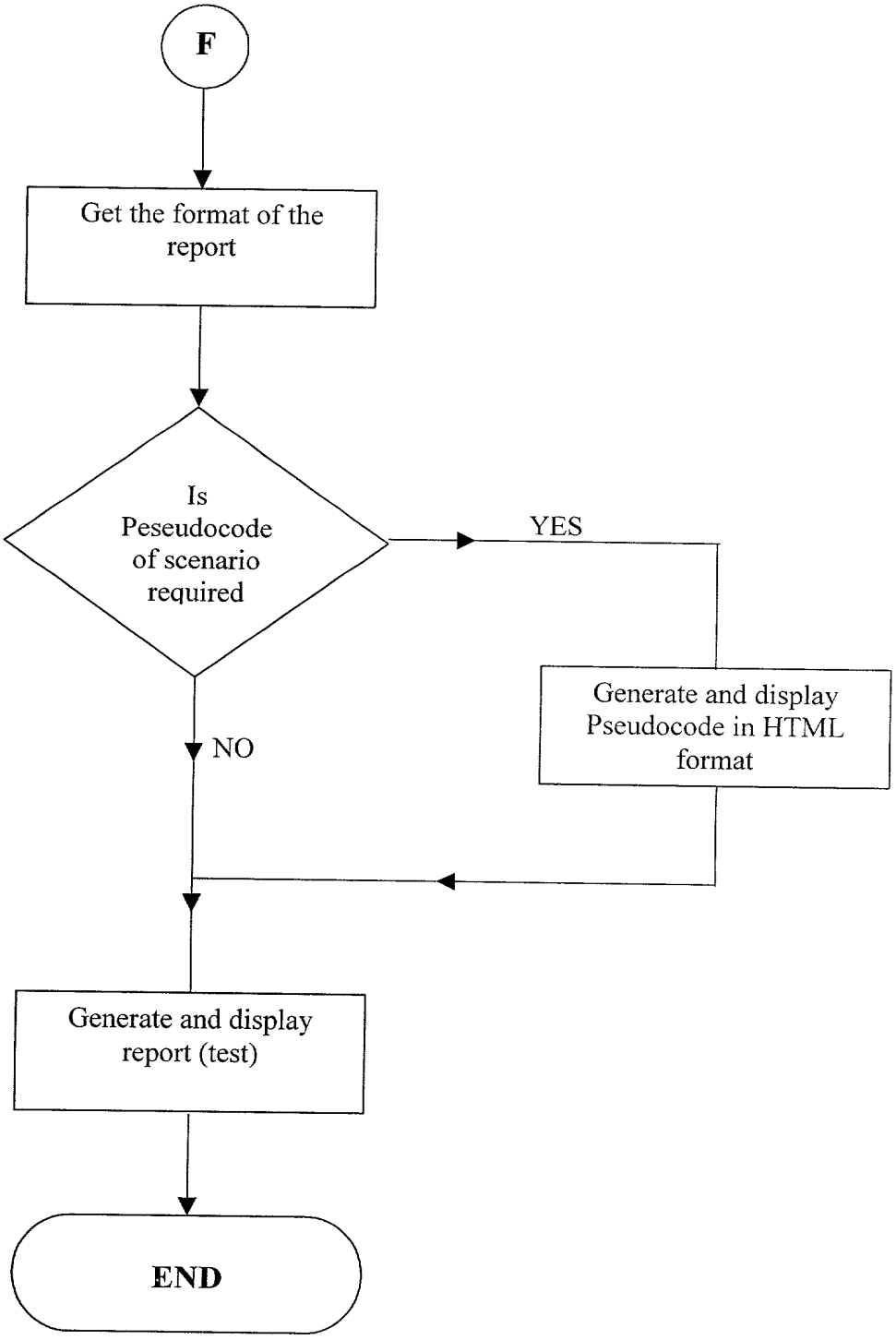
F
Get the format of the report
Is Peseudocode of scenario required
YES
NO
Generate and display Pseudocode in HTML format
Generate and display report (test)
END

Figure 5d

TEST SCENARIO GENERATION

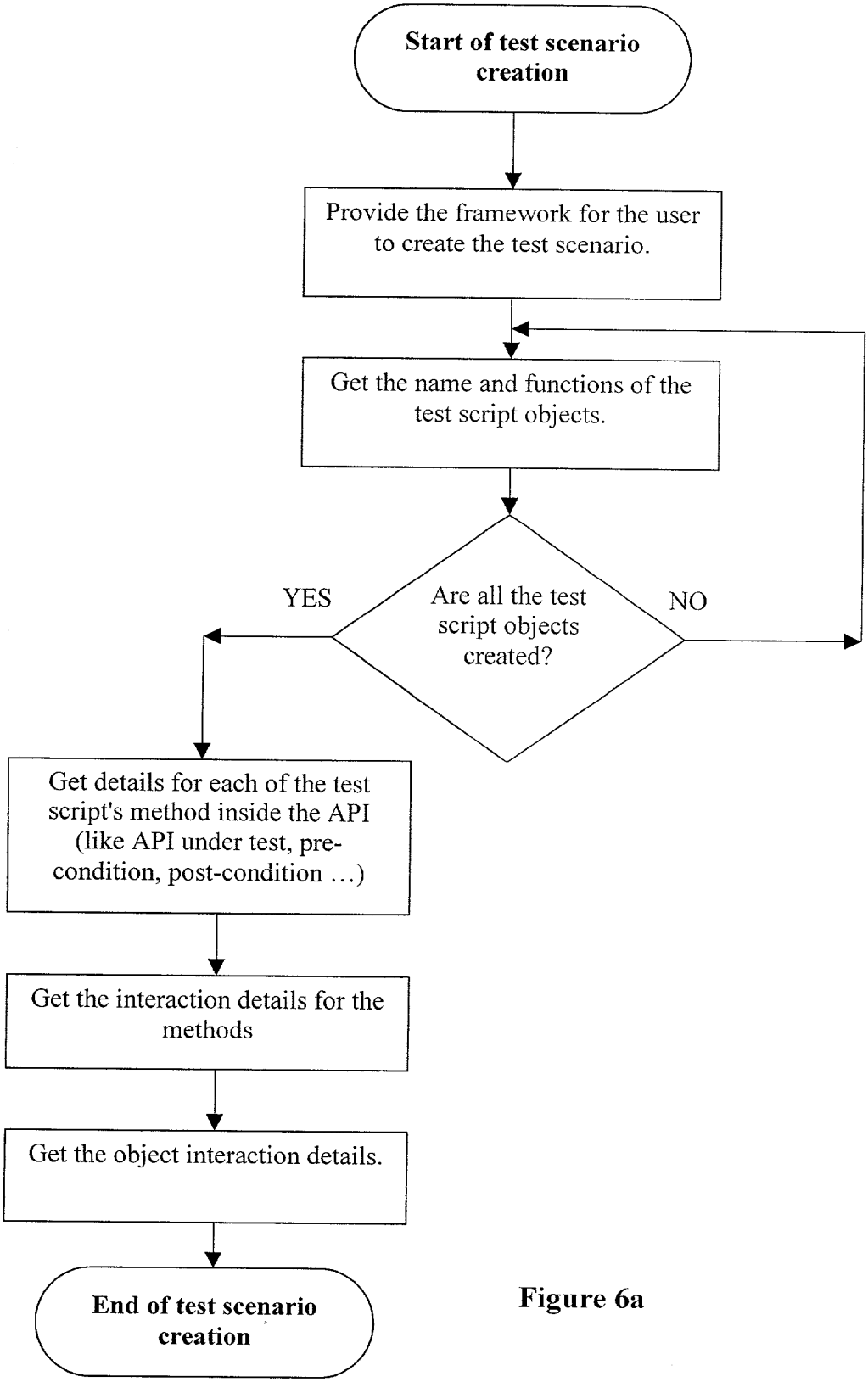

Figure 6a

TEST CASE GENERATION

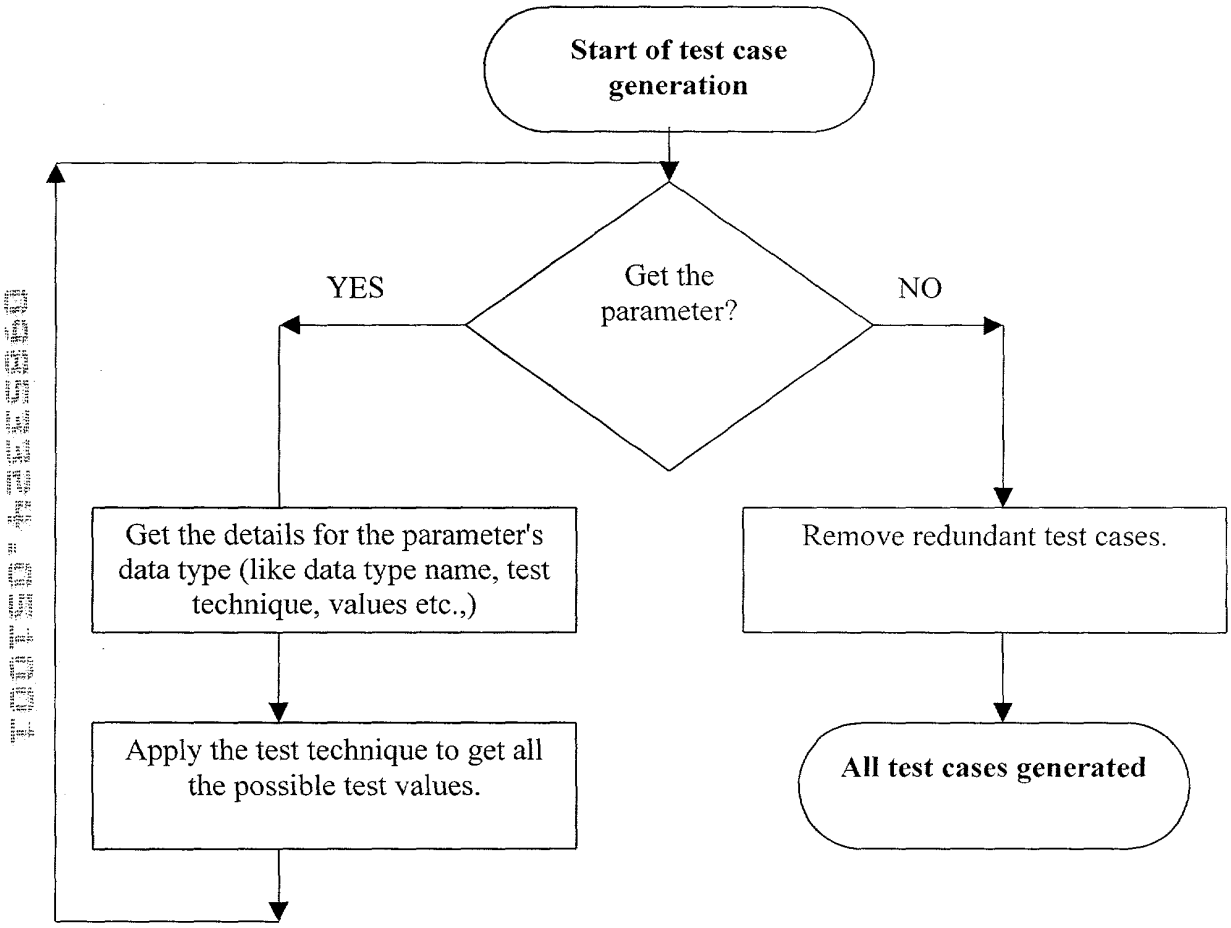

Figure 6b

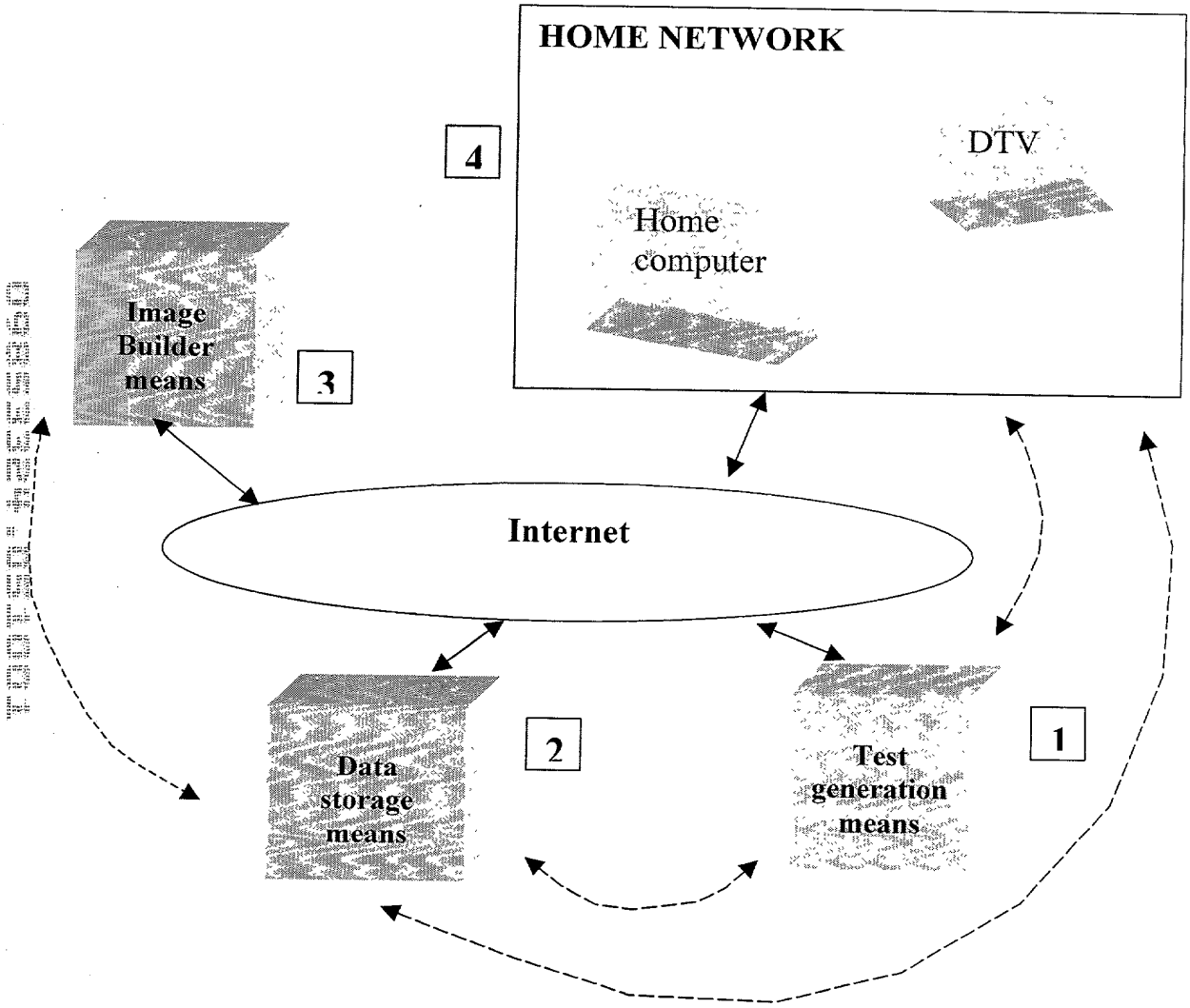
HOME NETWORK
4
DTV
Home computer
Image Builder means
3
Internet
Data storage means
2
Test generation means
1

Figure 7